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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,013	07/30/2003	Manabu Kai	FUSA 20.530	8513
7590 03/09/2005 Katten Muchin Zavis Rosenman 575 Madison Avenue New York, NY 10022-2585			EXAMINER LEE, BENNY T	
			ART UNIT 2817	PAPER NUMBER

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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FILED DATE:

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1999

DATE OF ACTION:

☐ This application has been examined ☒ Responsive to communication filed on 21 Dec 2004 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), \_\_\_\_\_ days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.             | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-5, 7-10, 12, 13 are pending in the application.  
Of the above, claims 2-5, 8-10, 12, 13 are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1, 7 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☒ Claims 1-5, 7-10, 12, 13 are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_ Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☒ The proposed additional or substitute sheet(s) of drawings, filed on 21 Dec 2004, has (have) been ☒ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other \_\_\_\_\_

### DETAILED ACTION

Claims 2-5; 8-10; 12; 13 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the Paper filed 8 March 2004.

The substitute specification filed 21 December 2004 has been disapproved since applicants' have not provided a "marked-up" copy of the substitute specification for comparison purposes with the "clean copy" of the substitute specification. Clarification is required. Accordingly, all the specification objections, as set forth below, remain in effect.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms, which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

At all occurrences, throughout the specification, note that "owing" should be rewritten as --due-- (e.g. p. 6, l. 24; p. 13, ls 41, 44, p. 14, ls 26, 31, p. 15, l. 2, p. 16, l. 45). At all occurrences, note that "pass characteristic" should be rephrased as --pass band characteristic--. Page 16, lines 20, 22, note that -- % -- should follow "10" and "90" respectively. Page 17, line 42, note that --:-- should follow "51".

The disclosure is objected to because of the following informalities: Page 1, line 33, note that it is unclear which "characteristics" are "stabilize". Page 2, lines 5, 15, note that --19-- should precede "(B)" and "(A)", respectively; lines 6, 8, note that --[see fig. 19(A)]-- should follow "1(B)" and "1(C)", respectively for clarity of description; line 16 note that --[see fig. 19

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(B)]-- should follow "1(H)" for clarity; line 31, note that --21-- should precede "(B)". Pages 6, 7, note that the brief description of figures (2, 3, 9, 10, 14, 19, 21) should be respectively rewritten to include the drawing labeling as provided in the drawing figures (e.g. "Fig. 3" should be --Figs. 3(a) 3(b), 3(c) --, etc). Page 8, line 33, note that --(BPF)-- should follow "filter" for consistency of description. Page 10, line 10, note that --as shown in Fig. 1-- should follow "ALM" for clarity of description. Page 11, line 27, note that -- $t_1, t_2, t_3, t_4$ -- should follow "intervals" for clarity of description. Page 12, lines 22, 23, note that "loss from a head of the low noise amplifier 12" is vague in meaning and needs clarification; line 37, note that "latter" should be rephrased as --receive antenna 32-- for clarity of description. Page 13, line 12, note that it is unclear whether "in reverse from the antenna" is a correct characterization. Page 16, lines 1, 6, 40 and page 17, lines 2, 5, 8, should "pilot signal amplifier" correctly be --pilot signal detector-- at each occurrence? Page 16, line 30, note that --as shown in fig. 14(A)-- should follow "12" for clarity of description; line 38, note that "ratio of 5:5" is vague in meaning and needs clarification. Appropriate correction is required.

The disclosure is objected to because of the following informalities: Note that in the description of the following drawing figures, the cited reference labels need explicit description therewith: Figs. 3(B), 3(C), all labels therein; fig. 9(A) 9(B) 9(C), 9(D), "T=T<sub>0</sub>" and S21; fig. 9(A), "T=T<sub>2</sub>" and "T=T<sub>1</sub>"; Fig. 9(b), "f<sub>c1</sub>" and "f<sub>c2</sub>"; Fig. 10 (Sf<sub>c1</sub>, Sf<sub>c2</sub>); figs. 12, 14(B), 16, all reference labels therein; Fig. 13, [S21 (T=300K)]; Fig. 19(b) "1e". Appropriate correction is required.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, each of the pilot signals being

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inputted into the filter, as recited in claims 1 & 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification lacks a description of both the pilot signals being inputted into the filter, as presently recited in amended claims 1 & 7.

Claims 1, 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 7, note that the amended limitation that each of the “two pilot signals” is being inputted into “said superconducting filter” does not appear consistent with what is disclosed by the specification. Note that as depicted in figs. 11 & 15, which correspond to the embodiments recited in claims 1 & 7, only one of the received or pilot signals is inputted into the superconducting filter (11) while the other pilot signal is inputted into the low noise amplifier (12) in contradistinction to what has been recited in claims 1 & 7. Accordingly, clarification of the above ground of rejection is required by: either providing support in the disclosure for the amended limitations in claims 1 & 7 or amending claims 1 & 7 to properly characterize what has been disclosed in the original specification and drawings.

Claims 1, 7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

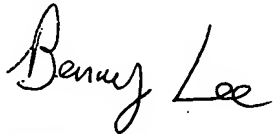
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benny Lee whose telephone number is 571 272 1764

A handwritten signature in black ink that reads "Benny Lee". The signature is written in a cursive, flowing style.

B. Lee

BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817